

Attachment A

Narrative



1.0 INTRODUCTION

Motorsports Holdings LLC (Club Motorsports/Applicant) is pleased to submit this Application for a Special Use Permit to the Town of Tamworth Planning Board (the Board) for the proposed Valley Motorsports Park Project (the Project) located off Route 25 (Route 25) in Tamworth, New Hampshire. Club Motorsports is proposing to construct a private country club and motorsports facility on an approximately 251-acre parcel of land (the Site). Please refer to Figure A-1 in Appendix A for site locus map. The Project will include the phased construction of a 3.1-mile long, European-style road course and associated driving and country club facilities.

As defined in Section A of the Tamworth Wetlands Conservation Ordinance (the Ordinance), the purpose of the Ordinance is to "protect the public health, safety and general welfare by controlling and guiding the use of lands subject to standing water, flooding, and high water tables for extended periods of time". As defined in Section B of the Ordinance, waterbodies include areas of surface waters such as lakes, ponds, rivers and streams as well as those drainage ways which have continuous flow for at least 30 days during the growing season on an average day. Wetlands are defined as those three essential characteristics (1) hydrophytic vegetation (2) hydric soils and (3) wetland hydrology. For the purposes of this Project, the wetlands and waterbodies as identified on the Site and as shown in the attached Project Plans in Appendix D. For consistency with the Ordinance, the wetlands and waterbodies on the Site that are subject to ordinance will be referred to as the Wetlands Conservation District (WCD).

Accordingly, this application will provide the Board with an overview of existing conditions within the WCD, a brief project overview, detailed discussions regarding those portions of the Project within the WCD, and an overview of stormwater management measures for work in or near the WCD.

The Plans and information provided in this application are the result of over two years of design and cooperative efforts with the New Hampshire Department of Environmental Services (NHDES), the US Army Corps of Engineers (USACE), and the Town of Tamworth Conservation Commission (TCC). As you will see, all efforts have been made to minimize and eliminate impacts within the WCD and the 25-foot buffer to wetlands (the 25-foot buffer). Further, this application provides the necessary information to demonstrate that the Project meets all the agreements of the Ordinance and has been designed to minimize any impact to on-site or off-site wetland's capacity to support fish and wildlife, prevent flooding, supply and protect surface and ground waters, control sediment, control pollution, support recreational activities and promote public health and safety.

As described in the Army Corps of Engineers Permitting documents, "The wetlands to be filled provide important functions and values for flood flow alternation, [but] negligible groundwater recharge/discharge due to low transmissivity, wildlife habitats, sediment/toxicity/pathogen retention/nutrient removal/retention/transformation, production export, sediment/shoreline stabilization, visual quality/aesthetics, and education/scientific value." In other words, with the exception of moving and storing water, the wetlands provide no other important function or value. The one function the wetland does have (flood flow alteration) has been effectively mitigated on-site (Section 4.0).

1.1 Purpose

The purpose of this application is to provide the necessary information to the Board to approve the Application in accordance with the Ordinance:

1. That the Board grant to Club Motorsports a Permit as allowed in the Special Provision identified in Section E (2) for the project.
2. That the Board grant to Club Motorsports a Special Use Permit (as allowed in Section E(1)(a) of the Ordinance) for those portions of the Project, including roads and other access ways that are within the WCD, as defined in the Ordinance.
3. That the Board grant to Club Motorsports a Special Use Permit as allowed in the Special Provision identified in Section F(2) for those Project features located within 25-feet of the limits of wetlands (work within the 25-foot Buffer).

The limited impacts to the WCD and work proposed within the 25-foot buffer are discussed herein and shown on the attached Project Plans (the Plans) (Appendix D).

1.2 Overview of Other Wetland Related Permit Applications

The following state and federal permits have been filed and obtained from the appropriate regulatory authorities for the proposed Project:

Permit	Issuance Date	Purpose
NH Standard Dredge and Fill Permit No. 2004-00377	July 29, 2004	NHDES review and approval of all wetlands impacts, including secondary and related impacts.
USACE Section 404 Individual Permit NAE-2005-2107	August 26, 2005	US Army Corps of Engineers review and approval of all wetlands impacts, including secondary and related impacts.
NHDES Site Specific Permit No. WPS-6920	September 20, 2004	Review and approval of all storm water management system designs and calculations, erosion and sedimentation control measures, and construction phasing.
NHDES 401 Water Quality Certificate No. 2004-002	March 22, 2005	Sets water quality standards for the project to meet both during construction and following project completion.

The EPA Storm Water Program requires National Pollutant Discharge Elimination System (NPDES) permit for discharge from construction projects that alter one or more acres of land. The Project falls under the NPDES Construction General Permit (CGP). The Applicant has prepared a Stormwater Pollution Prevention Plan (SWPPP), and will file a Notice of Intent to obtain coverage under the CGP prior to the start of construction. It has been determined that the Project does not require an Individual NPDES permit (Appendix J).

1.3 Summary of Wetland Conservation District Impacts

The Project Site contains a total of 15.14 acres of combined wetlands and waterbodies, which represents 6% of the total land area of the parcel (251 acres). None of the wetlands on the project site are designated as prime wetland. The project layout presented herein includes a total of 16 different areas of impact under the WCD. These direct impacts result in a total disturbance of approximately 31,711 square feet (0.73 acres) to the WCD, which represents approximately 4.8% of

the total wetlands and waterbodies identified on-site and approximately one half of which are intermittent or seasonal streams and drainageways.

1.4 Summary of Impacts to the 25-Foot Buffer Zone

All efforts have been made to avoid construction activity with 25 feet of the limits of wetland within the project site. The total area of site within the 25-foot buffer to wetlands encompasses approximately 10.3 acres. The Project layout presented herein has been designed to minimize impacts to the 25-ft buffer to approximately 2.1 acres (20.4 %). These buffer zone impacts are primarily associated with the grading of roads, access ways, and parking areas. There are no buildings of subsurface sewage disposal systems located within the 25-foot buffer area.

2.0 EXISTING CONDITIONS

This section provides an overview of the existing wetlands and waterbodies (collectively the Wetlands Conservation District) present on and in the vicinity of the Site. Information contained in this section is based upon a combination of field investigations completed by ESS Group, Inc (ESS) in the Fall 2003 and Spring 2004 and the most current mapping available from the New Hampshire Statewide Geographic Information System (GRANIT). The wetland delineation was reviewed and amended in April 2004, and determined to be accurate by the regulatory agencies and the Town's wetland consultant in July, 2004 (Appendix E). Further, the wetland delineation was determined to be consistent with the Town's requirement that the methodology outlined in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (January, 1989) be utilized to determine the precise location of the WCD boundaries on the affected properties (Appendix F). The wetland boundary is considered valid for a period of 5 years from July 7, 2004 (Appendix G).

2.1 Overview of Site

The Site is located on the south side of Route 25 in Tamworth, New Hampshire and covers an area of approximately 251-acres. A site locus map is provided as Figure A-1. In addition, plans showing existing conditions on the Site are included in the Project Plans. The Site is bounded by Route 25 and the Lakes Region Fire Apparatus facility to the north, conservation land owned by the Chocorua Forestlands, LLC to the south, undeveloped privately-held land to the east, and town-owned land occupied by the local transfer station to the west. A tax map of the area, illustrating the Site's relationship to adjacent properties, is provided as Figure A-2. A portion of the Project is on the Lakes Region fire apparatus site. A letter from Lakes Region granting permission for the Project is attached as Appendix C.

The property is located along side other commercial and industrial businesses. In addition to the Lakes Region Fire Apparatus and the Town's Transfer Station, the following businesses are located approximately one mile from the site and also border Route 25:

- Johnson Oil and Gas (distributed heating oil, propane, and kerosene)
- David Welch Log Yard
- Peter Wyhte Welding

- Global Filtration Systems, Inc.
- Bessey Log Yard
- Windy Ridge (chainsaw sales, repairs, service)
- Chocorua Valley Gravel (gravel operation with rock crusher)
- Chocorua Valley Lumber
- Ossipee Mountain Land (firewood)
- Jim Elliott's Saw Mill

2.1.1 Topography

The portion of the Site adjacent to Route 25 consists of a low-lying area with an average elevation of 450 feet above sea level. From this area, the topography slopes gradually upward to the southern boundary of the Site. At the southern boundary of the Site the highest elevation is approximately 1,130 feet above sea level. This is a slope change of approximately 680 feet over a length of approximately 4,900 feet, for an average slope of 14%. The peak of Mount Whittier is approximately 3,000 feet southwest of the Site at elevation 2,220 feet above sea level.

2.1.2 Geology and Soils

The majority of the Site is located within mapped till and crystalline bedrock uplands (Ossipee Mountains) which constitute the geologic feature termed the Ossipee Ring Dike. The structure of the Ossipee Mountains is a classic example of cauldron subsidence. The Ossipee Mountains consist of three broad structural units: 1) the Moat volcanics, 2) the ring dike, and 3) the central stock. The Site is located within an area mapped as Winnepesaukee Quartz Diorite (nhw) within the ring dike structural unit (The Geology of the Ossipee Lake Quadrangle, New Hampshire, Wilson, 1969).

The Site is located on the outer edge Ossipee River Valley Aquifer (see Figure A-3). The mapped aquifer materials on the Site are described as alluvium consisting of interbedded layers of gravel, sand, silt and clay (Newton, 1974). This material is mapped as having a transmissivity rate of 0 to 1,000 square feet per day, characterizing a low productivity area. This information is consistent with the findings from shallow test pits and soil borings completed on the northern portion of the Site in 2003. The soil borings generally encountered dense sands and/or sands and gravel with varying amounts of silt and clay grading to silt and clay overlying dense glacial till. Thicknesses of the unconsolidated deposits in this portion of the Site were observed to be over 40 feet in some areas. The majority of the Site consists of upland areas dominated by varying thicknesses of glacial till overlying crystalline bedrock.

The Natural Resource Conservation Service (NRCS) mapping identifies several soil units on the Site (see Figure A-4). The lower, northern portions of the Site are mapped as Salmon very fine sandy loam (sandy subsoil variant), Colton gravelly loamy fine sand, and Croghan fine loamy sand; these soil units are typical to floodplains and/or glacial outwash plains. Also mapped in this lower portion of the Site is Naumburg loamy sand, a hydric soil typical of depressions near

streams, lakes or bogs in glacial outwash plains. The upper, southern portions of the Site are mapped as Becket very stony fine sandy loam, Skerry very stony fine sandy loam, Marlow very stony fine sandy loam, Herman very stony fine sandy loam, and Lyman-Berkshire rock outcrop complex; these soil units are located along hillsides and mountainsides and are formed in deposits of glacial till.

2.1.3 Hydrogeology

The hydrogeologic characteristics of the Site and surrounding area have been defined by a review of various local, state, and federal publications and verified through field investigations. The regional groundwater flow direction is anticipated to be in a northerly to northeasterly direction towards the Bearcamp River. Depth to groundwater in the northern areas of the Site (along Route 25) range from 2 feet to 10 feet below ground surface within the unconsolidated alluvial materials. Despite the presence of significant thicknesses of the mapped alluvial deposits within this portion of the Site, the transmissivity of these deposits is likely to be relatively low compared to those mapped for the main portions of the Ossipee River Valley Aquifer, which are located off the Site to the north. This is based on the dense sands and considerable thicknesses of clay and silt that were observed in the borings completed on the Site in 2003. Between 500 and 1,000 feet to the south of Route 25 on the Site, the alluvial deposits are expected to decrease in thickness, with glacial till and shallow bedrock dominating the surficial geology on the remainder of the Site. Limited groundwater is anticipated to be present within the till deposits which typically have low hydraulic conductivities. Groundwater is also anticipated to flow within the fractures of the crystalline bedrock beneath the entire Site, and it is likely that the general direction of groundwater flow within the bedrock is similar to that of the unconsolidated deposits (northerly to northeasterly).

2.1.4 Floodplains

No portion of the Site is located within a mapped 100-year floodplain, as identified on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map for this region (Community Panel No. 330018 0010 B; Figure A-5).

2.1.5 Federally and State-Listed Rare, Threatened or Endangered Plant and Animal Species

No known state- or federally-listed threatened or endangered species or critical habitats are known to occur in the immediate vicinity of the Site, based on correspondence from the United States Fish and Wildlife Service (USFWS) and the New Hampshire Natural Heritage Inventory (NHNHI). Refer to Appendix C for Correspondence.

2.1.6 State of New Hampshire Prime Wetlands

No prime wetlands occur on the Site based on the most recent map of Prime Wetlands in Tamworth, New Hampshire (see Figure A-6). The closest Prime Wetland to the Project is the Bearcamp River and associated floodplain wetlands on the north side of Old Route 25, mapped as Prime Wetland #41. The Buffer Zone of these wetlands, as depicted on the Prime Wetlands Map, does not extend onto the Site. This Project will have no impact on these wetlands.

2.2 Wetland Conservation District Existing Conditions

The following sections provide a summary of the wetland and waterbody identification on the Site and present a general overview of the various types of wetlands identified on the Site. In summary, the Site contains numerous intermittent stream channels, one perennial stream channel, and several vegetated wetlands. As would be expected, based on topography, the majority of the vegetated wetlands exist on the lower, flatter portions of the Site, while the stream channels exist on the steeper portions of the Site.

In general, stream channels are rocky with no vegetation and mostly have flow during rain or runoff (snowmelt) events depending upon location.

2.2.1 Identification of Wetlands and Waterbodies

Jurisdictional wetlands and waterbodies (i.e. limits of the Wetlands Conservation District) were identified by ESS in the Fall 2003 with additional field investigations in the Spring 2004. The Project Plans present an Existing Conditions plan set showing the Site with wetland resource areas, identified by ESS and reviewed by the USACE, the NHDES Wetlands Bureau, and the Tamworth Conservation Commission and their consultant, in the Spring 2004. In summary, all involved regulatory agencies have reviewed the boundaries of the WCD and concur on their limits (Appendix E). The WCD boundaries also are consistent with those delineated using methods outlined in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (January, 1989) (Appendix F). The wetland delineation is determined to be valid by the Army Corps of Engineers for a period of 5 years from the date of issuance July 7, 2004 (Appendix G).

2.2.2 Overview of Wetlands and Waterbodies

The Site contains vegetated wetlands, intermittent stream channels, one perennial stream channel and one vernal pool. These wetland and waterbody areas encompass approximately 15.14 acres. Vegetated wetlands are predominantly forested swamps, including red maple swamps and low-lying hemlock stands, located on the northern portions of the Site. Wet meadows are also present on the Site. Intermittent streams on the Site are first- and second-order mountain streams that range from 1 to 15 feet wide. As determined by NHDES, there is a segment of stream channel on the Site (located within Wetland Area A), which exhibits perennial

stream characteristics. This stream segment is clearly identified on the Project Plans. The following subsections present a general overview of each type of wetland on the Site.

Hemlock Swamps

Ground cover within hemlock swamps have a ground cover dominated by Sphagnum moss, goldthread (*Coptis trifolia*) and cinnamon fern (*Osmunda cinnamomea*) and are identified as low hemlock-hardwood/cinnamon fern forest. Wetland K1 and the lower portions of Wetland C are characterized as a Hemlock Swamp.

Red Maple Swamps

Red maple swamps are located in the northern portions of the Site adjacent to Route 25. These forested swamps are associated with the lower reaches of the mountain streams. Vegetation is dominated by red maple in the tree layer; hobblebush in the shrub layer; and cinnamon fern, sensitive fern, New York fern, goldthread, and Sphagnum moss in the herb layer. Wetlands BB, CC, K4 and the lower portions of Wetlands A and B are characterized as Red Maple Swamps.

The red maple swamps on the Site have hummock-hollow microtopography, which has been created both naturally and by prior logging activities. The hollows are seasonally flooded in the fall and spring. Depth of flooding varies depending on location and precipitation levels, but appears to be relatively shallow (less than 1-foot) and does not last into the summer months.

Wet Meadows

Wet meadows and emergent marshes are primarily located within the Route 25 layout, around the perimeter of the upland field, at Wetland G and in small pockets within Wetland B. Wetlands N1, T1, T2, AA, L, and U exhibit characteristics of wet meadows.

Wet meadows within the Route 25 layout include roadway drainage swales and portions of larger wetlands that are regularly mowed for highway maintenance and are vegetated with turtlehead, cinnamon fern, sensitive fern, marsh fern, cranberry, shallow sedge, steeplebush, rough-stemmed goldenrod, soft rush, wool grass, purple-stemmed aster, and Sphagnum mosses.

Wet meadow habitat is located along the perimeter of the upland field. These wet meadows are either portions of a larger wetland system that was previously cleared or small isolated depressions within the field. They are currently vegetated with swamp candles, soft rush, shallow sedge, steeplebush, sensitive fern, lance-leaved goldenrod, swamp dewberry, lady fern, tearthumb, water horehound, and Sphagnum moss.

Vernal Pool Habitat

Wetland G is an emergent marsh in the central portion of the Site. Vegetation in the wetland is dominated by tussock sedge, wool grass, manna grass, beggar ticks, bugleweed, marsh fern and cinnamon fern. Wetland G is connected to an intermittent stream channel (Wetland A) by an old wooden culvert beneath a cart path. Other than this restricted outlet, the wetland is an isolated depression that floods seasonally. During the Spring 2004, field investigations confirmed the presence of spotted salamander (*Ambystoma maculatum*) egg masses and wood frog egg masses (*Rana sylvatica*) within this wetland. Accordingly, this wetland area is functioning as vernal pool habitat.

Streams

Flowing waterbodies within the site are predominately intermittent, with the exception of a portion of the stream flowing through Wetland A. Based on field investigations completed by NHDES, the main stream in Wetland A, north of flag F4, has been determined to be perennial. Refer to Existing Conditions Plan EX-5 for the location where the stream becomes perennial. The remaining intermittent streams are first- and second-order mountain streams that range from 1 to 15 feet wide. Substrate type varies by stream and location of the reach, and includes gravel and cobbles, organic material and leaf litter, small boulders, vegetation, and bedrock. Some of the streams are unvegetated with well-defined, undercut banks, whereas others have poorly defined banks and are vegetated with *Sphagnum* moss, cinnamon fern and other herbaceous vegetation. Wetlands F, K2, K3, YY, and the upper portions of Wetlands A, B, and N2 are classified as streams.

Flow within all the stream channels on the Site is best described as "flashy" in nature. That is to say, water levels and flow vary significantly prior to and following snow melt or rain events. Due to the mostly intermittent nature of the streams on the Site it is not anticipated that any of the waterbodies on the Site provide fish habitat. These stream areas do not meet the 30 day continuous flow criteria during the growing season on an average year as noted in the wetland definitions of the WCD ordinance.

2.2.3 Functions and Values Assessment of Impacted Resources

As described by the Army Corps of Engineers, the impacted wetlands provide important functions and values for flood flow alteration, but have negligible functions and values for: groundwater recharge/discharge due to low transmissivity, wildlife habitat, sediment/toxicant/pathogen retention, nutrient removal/retention/transformation, production export, sediment/shoreline stabilization, visual quality/aesthetics, and educational/scientific value (Appendix H). In basic terms, the wetlands and waterbodies have a principal function of transporting and storing stormwater runoff. For the other wetland functions and values, the onsite WCD areas are functioning at very low levels. The wetlands and waterbodies on site are low value resource areas.

3.0 PROJECT DESCRIPTION

The following sections will provide general information regarding the Project and is being presented so that the Board may have an understanding of the overall Project. However, as previously noted, this application specifically targets those portions of the Project within the Wetlands Conservation District and within the 25-foot buffer. Activities within the Wetlands Conservation District are limited to roadway and other access way crossings. Activities located within the 25-foot buffer include roadways and access way crossings and their associated grading, as well as, proposed grading for other site features. Section 5.0 of this application provides a comprehensive summary of proposed activities located within the WCD and the 25-foot buffer. Additional information on the proposed Project is presented in both the Joint Federal and State Wetlands Permit Application and the Site Specific and Terrain Alteration Application.

3.1 Project Principal Components

In general, the Project will be completed in two separate phases (Phase 1 and Phase 2). Phase 1 is anticipated to be completed within 9 to 12 months from the beginning of construction and includes construction of the components of the Project necessary to initiate and support driving operations such that the facility could actively operate as a motorsports country club facility. Phase 1 will also involve the clearing and rough grading of areas identified for some of the Phase 2 components. Stormwater management facilities presented herein have been designed and will be constructed during Phase 1 to support the full build-out of this Project through the completion of Phase 2.

3.1.1 Phase 1 – Principal Components

The following are the Principal Components of the Project to be completed as part of Phase 1.

- **Road Course:** The most significant component of the Project is the 3.1-mile European style road course. Small portions of the road course are located within the Wetlands Conservation District and the 25-foot buffer. In general, these incursions include areas where the road course crosses intermittent stream channels and where fill associated with the construction of the road course impacts intermittent stream channels and/or edges of vegetated wetlands.
Paddock Areas: There will be three separate paddock areas located on the Site. None of the paddocks are located within the Wetlands Conservation District, however, in some instances grading associated with the construction of the paddocks is located within the 25-foot buffer. Paddock areas are large, relatively flat paved areas used for vehicle staging and parking and are integral to the operations of a motorsports facility of this type. The paddocks will serve as parking and staging areas for driving teams (cars, trucks and trailers), not for spectator parking. All three paddocks will be paved and will be graded to direct stormwater to catch basins.
Supporting Infrastructure: A number of buildings are proposed as part of the Project. None of these features are located within the Wetlands Conservation District, however, in some instances grading associated with these features is proposed within the 25-foot buffer. These proposed buildings include:

- Administration Building
- Maintenance Building
- Auto Repair Shop
- Pit Lane Garages
- Course Control Building
- Restaurant

3.1.2 Vehicle Support Services

The Site will have a self-contained concrete pad (approximately 100 foot by 200 foot) to stage a fuel distribution system. No portions of this site feature are located within the Wetlands Conservation District or the 25-foot buffer. This system will be supplied by an approved and certified manufacturer and will include a completely self-contained, aboveground, fuel storage tank and dispensing system. A Settlement Agreement details the limitations placed upon the fuel distribution system (Appendix K).

3.2 Phase 2 – Principal Components

All of the following Phase 2 – Principal Components are presented and labeled on the Project Plans. Please refer to the Project Plans to see exact location of these features on the Site.

- Hotel: A 75-room hotel will be constructed on the southwestern corner of the Site. It is anticipated that the hotel will include a 300-seat restaurant and a 50-seat lounge. The hotel is an important long-term feature of the facility to provide short or long-term housing for club members.

3.2.1 Lower Clubhouse Area

The lower clubhouse area will include the following:

- A locker room with showers (120 Lockers);
- Approximately 135 Garagemahals;
- Approximately 5000 square feet of meeting and retail space;
- A 100-seat pub style restaurant;
- Vehicle parking; and
- A vehicle and pedestrian bridge over the road course.

This site feature is not located within the Wetlands Conservation District.

3.3 Summary of Project Benefits

The Project will positively affect the community by creating new jobs during construction and at the facility following construction. The Project will generate more taxes than being currently generated from the site, and will furnish public services to the Town in the form of driver training for local police and fire departments, driver education for local teenagers and will provide fire and emergency response service to assist the Town. The Project will also benefit the Town's local business base by requiring support service in the form of automobile supplies stores, etc., and opportunities for local businesses that will service the increase in tourists and patrons that the facility is projected to attract. The short-term effects on aesthetics will be the greatest due to construction equipment, etc.

4.0 OVERVIEW STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL

The approved Site Specific Permit Application presents a detailed description of the proposed project approach to manage stormwater and implement construction phase erosion and sedimentation controls. Both the stormwater management system and the erosion and sedimentation controls were designed to meet or exceed, and have satisfied the requirements of NHDES. The following sections provide a summary of the information presented in the Site Specific Application.

4.1 Stormwater Management

The stormwater management system was designed in accordance with the guidance provided in the NHDES Green Book and in the NHDES Innovative Stormwater Treatment Technologies Manual. The stormwater management system was designed with the objectives:

- Maintain post-development peak rates of runoff to equal to or below the pre-development rates: The proposed stormwater management system incorporates multiple detention basins located throughout the Site to reduce the peak rate of runoff;
- Balance the post-development hydrologic regime of each of the wetland systems within watershed areas to maintain pre-development levels: The proposed stormwater management system uses both swale systems and closed pipe networks to direct stormwater throughout the Site to provide the necessary treatment, and detention, then discharges the water to the appropriate watershed to most closely match pre-development levels;
- Provide the necessary water quality treatment for stormwater run-off: The proposed stormwater management system uses numerous structural and non-structural Best Management Practices (BMPs) including vegetated filter strips, deep sump catch basins, extended detention basins, and advanced treatment units (e.g. stormceptors) combined with frequent sweeping of the road course and paddocks to remove the majority of the potential pollutant load.

4.2 Construction Phase Erosion and Sedimentation Control

Many construction-related techniques, including construction sequencing and physical BMPs are proposed for the project for erosion and sedimentation (E&S) control. These E&S controls prevent, or if not, certainly minimize adverse impacts within the WCD on the Site. The following sections present an overview of these techniques.

4.2.1 Generalized Construction Sequencing

As described in detail in the approved Site Specific application, construction activities will be completed in an established sequence to limit disturbances to wetlands and to expedite stabilization of disturbed areas. This section provides a general outline of the construction activities required to construct the Project. The sequence of individual activities will be determined by the Contractor and may vary slightly. Some activities may occur simultaneously. The generalized construction sequencing is proposed as follows:

- Mobilization;
- Install Erosion and Sedimentation Control Measures;
- Tree Clearing;
- Earthwork;
- Install Utilities;
- Construct Site Buildings; and
- Landscaping and Final Site Stabilization.

4.2.2 Construction Phase Erosion Control Plan

A construction phase Erosion Control Plan (ECP) has been developed to describe the types of erosion and sedimentation controls and stormwater management techniques that will be installed and maintained during construction of the Project. The Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Area in New Hampshire (August 1992) document was used as a guide for selecting erosion and sedimentation control procedures.

In general, the following erosion control measures and BMPs will be implemented prior to and during construction to minimize adverse impacts to wetlands and waterbodies on and adjacent to the Site from land disturbance activities.

- Tree preservation and protection;
- Installation of silt fence barriers and/or silt fence/haybale barriers;
- Construction of stormwater basins and swales;
- Utilizing temporary slope stabilization techniques such as temporary basins, hydroseed mixes, mulches, matting, etc.;
- Using temporary construction entrances to minimize migration of sediment onto adjacent roadways from construction vehicles.

- Managing soil stockpiles appropriately through wet suppression, seeding, soil tackifiers, or synthetic covers;
- Minimizing the amount of land disturbed simultaneously;
- Restabilizing exposed areas as soon as practicable; and
- Employing temporary soil stabilization by hydroseed on areas to be exposed for long periods of time.

All erosion control measures will be routinely inspected and maintained by the Contractor during construction operations. Temporary erosion controls will be removed from the Site after permanent site stabilization is achieved. Materials and installation methods will be specified in the Contract Documents.

The Applicant shall employ the services of an Environmental Monitor (EM), either a professional engineer with experience in erosion control at construction projects or a Certified Professional in Erosion and Sediment Control (CPESC), for the purposes of providing independent professional environmental inspections of the project. The NHDES will approve the selection of the EM per requirements of the Site Specific Permit WPS-6920.

Per the conditions of the NHDES Water Quality Certificate No. 2004-002, the Applicant shall collect surface water quality data and monitor benthic macro-invertebrate communities prior to and during the regular use of the facility.

The above monitoring is intended to ensure that the Project complies with all State and Federal Permits during pre and post-construction.

5.0 IMPACTS WITHIN WETLANDS CONSERVATION DISTRICT

The following sections identify each instance where a roadway or other access way associated with the Project is proposed within the WCD. The discussion in this Section presents a summary regarding the overall environmental impact of the proposed project for the factors identified in Section E(5)(a) and (b) of the Ordinance.

5.1 Overall Environmental Impacts within Wetland Conservation District

Overall, the proposed project includes 16 locations where impacts to the WCD will occur. The total area of direct impacts to the WCD is approximately 0.73 acres or 4.8% of the total acreage of wetlands and waterbodies on site. Since no areas have been designated as prime wetland or contain threatened or endangered species, these impacts are considered minor. The project has been designed to minimize impacts to all portions of the WCD, but has taken special care to avoid impacts to the vegetated wetlands at the Site impacting only 0.33 acres in total. In addition, whenever possible, curvilinear arches were used to span intermittent streams, avoiding direct impacts to the stream bank and bed. In summary, of the total impacts within the WCD (0.73 acres) are comprised of approximately 0.33 acres (45%) of vegetated wetland (some of which are adjacent to the

intermittent streams) and 0.4 acres (55%) of waterbodies (intermittent streams). Table B-1 presents a summary of the project wetland impacts within the Wetland Conservation District.

Because the impact areas are relatively small in relation to the entire wetland system, the environmental impact of the proposed Project within the Wetland Conservation District will not impair the overall wetland system's capacity to provide essential functions identified in Section E(5)(a) and (b) of the Ordinance.

5.2 Specific Impact Areas within Wetland Conservation District

The following sections provide detail regarding each individual impact area proposed within the Wetland Conservation District. Table B-2 provides the details of the impacts and classifications of wetlands within the Wetland Conservation District.

As discussed above, each of the impacts within the WCD are small and will result in no significant long-term deterioration of the primary function of the overall wetland systems on the Site. As outlined in Section 2.2, the various wetlands systems on the Site can be broken down into two major categories: vegetated wetlands and waterbodies (streams). On this Site, the majority of stream channels are intermittent with only a small portion of the stream channel in Wetland A perennial.

In general, vegetated wetlands provide slightly more functions than the intermittent stream channels due to their location in the landscape. The intermittent streams on the Site are defined flow patterns, with varying degrees of scoured channels and mainly convey overland runoff from rain events and snow melt, with varying influences from groundwater, depending upon location. As outlined herein, in the Joint Permit Application and the Site Specific Permit Application, the project has been designed such pre-construction watersheds and water budgets to intermittent streams will remain the same following construction of the facility.

Careful design consideration was given in order to ensure that intermittent stream channels, which currently convey water, will not dry up as a result of the Project. This will also ensure that downstream wetland systems, whether on or off-site will continue to maintain the proper hydrologic regime to function in the same manner and maintain their existing functions and value.

Table B-3 summarizes the approaches used during design development to minimize direct impacts to wetlands within the Wetland Conservation District to the greatest extent practicable. In general typical avoidance and minimization concepts included the following:

- Reduce roadway widths;
 - Reduce roadway shoulders;
 - Modify roadway alignment to cross at the most narrow section of streams;
 - Use steel arches to span stream channels and adjacent wetlands when possible;
- Steepen fill slopes from standard 2:1 to minimize Project footprint; and

Use retaining walls in place of fill slopes to minimize Project footprint.

Collis Adams, of NH Department of Environmental Services, said "The applicant has gone through an extensive process with us already. We feel they've done a good job to make sure they've avoided and minimized impacts as much as possible. According to the application, the expected amount of wetlands to be affected under the current proposal is about 32,000 square feet, or three-quarters of an acre. It was significantly higher," Adams said. "They've done a lot of work and taken a lot of our suggestions to heart." - Carrol County Independent, Thursday, March 25, 2004.

5.3 Activities Located Within the 25-Foot Setback

As previously stated, in addition to the activities associated with roadway crossings located within the WCD, there are instances where grading of roads, access ways, and parking areas will be within 25-feet of the limits of wetlands. These impacts can be seen on the Project Plans. The Project layout present herein has been designed to minimize impacts to the 25-ft buffer to approximately 2.1 acres (20.4 %). There are no buildings of subsurface sewage disposal systems located within the 25-foot buffer area.

5.4 Environmental Impact of the Proposed Action

The characterization of the environmental impact of the proposed action has been presented with respect to Section E(5)(a) of the Ordinance and includes summary of the effects of the project on the wetland's capacity to:

- Support fish and wildlife;
- Prevent flooding;
- Supply and protect surface and ground waters;
- Control sediment, control pollution; and
- Support recreational activities:.
- Effects of the wetland's capacity to support public health and safety

Table B-4 presents a summary of the considerations addressed in the Wetland Conservation Ordinance (Section E(5)) and related findings by the Corps of Engineers.

Effects on the wetland's capacity to support fish and wildlife: Construction methods will ensure that stream crossings are performed in the least intrusive manner; therefore any effect on in stream habitat and wetland habitat will be insignificant. According to the Corps of Engineers Environmental Assessment and Statement of Findings, the project will contribute slightly in the isolation of wildlife from the outer rim of the Ossipee Mountains to the Bearcamp River, where the location of old Route 25 and the new Route 25 already significantly contributes to this isolation. The

affect of the project on the migration of wildlife across the site will be mitigated by maintaining a corridor through the site for migration of wildlife upslope of the site.

Effects on the wetland's capacity to prevent flooding The project has been planned and designed to balance the hydrologic regime to wetland systems and maintain the pre-construction runoff volumes and flows. The site does not contain any designated floodplain areas. Therefore, the project will not have an adverse effect on the wetland's flood attenuation capacity.

Effects on the wetland's capacity to supply and protect surface and ground waters: The hydrology and drainage patterns with the wetlands on site will be maintained. The wetlands recharge/discharge potential will be unaffected, thus protecting surface and groundwater interactions.

Effects on the wetland's capacity to control sediment, control pollution: Prior to the initiation of construction activities, erosion and sedimentation controls will be installed to eliminate potential sediment and pollution impacts on wetlands. The Applicant has prepared an Erosion Control Plan and Stormwater Pollution and Prevention Plan (SWPPP) to eliminate the potential for adverse water quality impacts during Project construction. The New Hampshire Department of Environmental Services (NH DES) has issued a Site Specific Permit for the project that addresses these issues and will include monitoring. To reduce long-term effects, erosion and sedimentation controls will be maintained and operated in accordance with all Best Management Practices. The 401 Water Quality Certificate establishes strict requirements for surface water quality after construction of the Project. In addition, a Spill Prevention Control and Countermeasures Plan has been developed to handle any unforeseen event.

Effects on the wetland's capacity to support recreational activities The wetlands on site will continue to provide the same opportunities for passive recreation including hiking, birding and photography. The facility will also provide other recreational opportunities such as cross-country skiing during the off-season when the vehicles will not be on the course. In addition, the townspeople will have the opportunity to utilize the site for various recreational endeavors when the facility is not in operation.

Effects of the wetland's capacity to support public health and safety: The minor direct and indirect impacts on the wetlands will not adversely affect the wetlands capacity to support health and safety. The project has been designed to avoid impacts to wetlands thus offering protection of public water supply, recharge and discharge, pollution control, flood hazards and erosion and sedimentation control. Due to the low transmissivity of the underlying aquifer the Project will have negligible impact on recharge of the aquifer. The applicant will not have any unusual water requirements for the operation of the facility; therefore impacts to water supply and conservation interests are insignificant.

The above responses to the standards of review posed in Section E.5.(a) of the WCO have been supported by comments offered by the Corps of Engineers Environmental Assessment and Statement of Findings (Appendix H).

5.5 Character and Degree of Injury to, or Interferences with Safety, Health, or the Reasonable Use of Property

The character and degree of injury to, or interferences with safety, health, or the reasonable use of property has been presented below with respect to Section E(5)(b) of the Ordinance and includes summary of the insignificant effects of the project on the following:

- Abutting or downstream property, which would be caused or threatened by the proposed activity, or the creation of conditions which may do so;
- Potential damage from erosion, turbidity, or siltation;
- Loss of fish and wildlife and their habitat;
- Loss of unique habitat having demonstrable natural, scientific, or educational value;
- Loss of diminution of beneficial aquatic organisms and wetland plants;
The dangers of flooding and pollution; and
- The destruction of the economic, aesthetic, recreational, and other public and private uses and values of the wetlands to the community:

Abutting or downstream property, which would be caused or threatened by the proposed activity, or the creation of conditions which may do so: The proposed stormwater management system incorporates ten separate detention basins located throughout the Site to reduce the peak rates of runoff to levels equal to or below the pre-developed rates. Watershed characteristics will not be altered to affect abutting of downstream properties. Notwithstanding, a stringent stormwater management plan and erosion and sedimentation control system has been developed for the Project

Potential damage from erosion, turbidity, or siltation: The NH DES has issued a Water Quality Certification for this Project after a careful review of water quality issues. The proposed stormwater management system uses multiple structural and non-structural Best Management Practices (BMPs) including vegetated filter strips, deep sump catch basins, extended detention basins, advanced treatment units (e.g. Stormceptors). When combined with frequent sweeping of the road course and paddock areas the majority of the sediment and corresponding potential pollutant load will be removed. The Project will prohibit the use of de-icing chemicals and road sand on the road course and throughout the majority of the Paddock areas. This, combined with strict adherence to the maintenance of structural BMPs will result in no significant sediment loads or risk of other potential sources of pollution to the site surface waters.

Loss of fish and wildlife and their habitat: No prime wetlands occur on the Site based on the most recent map of Prime Wetlands in Tamworth, New Hampshire. Potential impacts to wildlife have been minimized to the greatest extent possible through a combination of mitigation measures and layout changes. Of significance, large arch spans will be incorporated into many of the intermittent stream crossings to maximize wildlife passage and hydrologic connectivity within on-site wetlands. For safety purposes, the track (not the property) will be fenced to avoid potential road mortality for large mammals trying to traverse the site. According to the Corps of Engineers Environmental Assessment and Statement of Findings, the project will contribute slightly in the isolation of wildlife from the outer rim of the Ossipee Mountains to the Bearcamp River, where the location of old Route 25 and the new Route 25 already significantly contributes to this isolation. Forested areas within and adjacent to the property will be connected with an approximate 200-foot undeveloped corridor to provide large and small mammal access among on-site and off-site habitat areas. The intent of the 200-foot corridor is to provide a safe small-scale (i.e. local) travelway to allow functional connectivity between the existing local habitats. Woodlot Alternatives conducted a detailed landscape-level corridor study and determined that the project will not impact any large landscape-level corridors. The forested areas adjacent to the proposed track will also provide habitat to songbirds, small mammals, reptiles, and amphibians. The layout of the track has been modified to provide sufficient upland habitat adjacent to the sites' vernal pool that will support vernal pool species during the non-breeding season (fall through winter). This concept has been reviewed and approved by the DES Wetlands Bureau and the U.S. Army Corps of Engineers. In addition to minimizing direct habitat loss, the project design has incorporated provisions that mitigate potential secondary impacts to wildlife. By agreement with the Army Corps of Engineers (ACOE), the track will only be operated during the day, and no lights will be used to illuminate the track at night. This, in conjunction with the maximum decibel level restriction negotiated with the ACOE will minimize potential interruptions to feeding and nesting cycles. Significantly, the project also proposes to protect approximately 107 acres including prime wetland and important upland buffer. This mitigation area greatly exceeds the DES Wetlands Bureau mitigation ratios for preservation, and will help to protect valuable wildlife habitat. In total, the project has put considerable effort into maintaining wetland habitat functions, minimizing upland habitat loss, maintaining connectivity, and reducing potential noise pollution. All of these considerations will help to maintain the current wildlife diversity on and near the property.

Loss of unique habitat having demonstrable natural, scientific, or educational value: As previously indicated, no known state - or federally-listed threatened or endangered species or critical habitats are known to occur in the immediate vicinity of the Site, based on correspondence from the United States Fish and Wildlife Service (USFWS) and the New Hampshire Natural Heritage Inventory (NHNHI). Refer to Appendix C for Correspondence. The Applicant has worked closely with State and Federal agencies to quantify and minimize any impacts to the vegetative communities and associated fish and wildlife habitat on site and is protecting valuable prime wetlands and its important upland buffer habitat within the proposed conservation easement.

Loss of diminution of beneficial aquatic organisms and wetland plants: The Applicant has avoided and minimized impacts to the aquatic resources (streams and wetlands) on site by using arch culverts over stream crossings. The direct alteration of 0.73 acres of wetland will result in no

significant impact to the benthic habitat and hydrophytes vegetation located in these areas. The water quality protection measure outlined below will minimize potential impacts to these resources adjacent to the site.

The dangers of flooding and pollution: As mentioned above, the project has been planned and designed to balance the hydrologic regime to wetland systems and maintain the pre-construction runoff volumes and flows. Prior to the initiation of construction activities, erosion and sedimentation controls will be installed to reduce potential sediment and pollution impacts on wetlands. The NH DES has issued a Site Specific Permit for the project that addresses these issues and will require monitoring. Surface water quality and flow monitoring is required to be conducted per the conditions of the 401 Water Quality Certificate (WQC). The monitoring program being implemented addresses the water quality of the wetlands and surface water on the site as well as at upstream and downstream locations on the Bearcamp River. Given the purpose of the WQC and because of the regulatory oversight associated with the WQC and the data reporting and evaluation responsibilities of NHDES, the protection of the potential water supplies, existing aquifers and aquifer recharge areas are also adequately addressed. Additionally the commitments made by the Applicant to prohibit the storage or sale of fuel containing MtBe on the site, to provide spill response stations throughout the course and the detailed design/construction/operation parameters established for the fuel distribution functions on the property further protect the quality of onsite and off site water resources (refer to Appendix K).

The destruction of the economic, aesthetic, recreational, and other public and private uses and values of the wetlands to the community. The proposed project impacts on wetlands represents approximately 4.8% of the wetland area within the property. This small scale and localized impact (distributed among 16 locations) will not result in destruction of any economic, aesthetic, recreational, and other public and private uses and values of the wetlands to the community. The Applicant will minimize the effects on the site by incorporating existing physical features and landscaping into the project design, maintain a low visual profile relative to the surrounding land and blend the Project into the existing forest. In fact, the facility will also provide other recreational opportunities such as cross-country skiing during the off-season when the vehicles will not be on the course.

The above responses to the standards of review posed in Section E.5.(b) of the WCO have been supported by comments offered by the Corps of Engineers Environmental Assessment and Statement of Findings (Appendix H).

5.6 Wetland Compensation Plan

The Ordinance does not identify mitigation requirements when work is proposed within the WCD nor does it set any standards to compensate for wetland impacts. For the mitigation requirements at the State and Federal levels, the proposed mitigation on-site for this site will provide for the restoration of 25 feet of intermittent stream and 450 square feet of stream bed. The restoration will entail the removal of a 12" culvert, and the stream will be restored back to its original conditions. The off-site

mitigation will entail the preservation via a conservation easement of a 107-acre parcel of land within the Bearcamp Watershed in Sandwich, NH. (Appendix H). The EPA has provided some direction for additional mitigation efforts (Appendix I). It is important to note that the Applicant is open to the concept of additional mitigation in the Town of Tamworth and has expressed their intent with the Subcommittee of the Tamworth Conservation Commission.

5.7 Summary of Consistency with Purpose and Intent of Wetland Conservation Ordinance

The proposed project's use is not in conflict with any of the purposes and intentions listed in Section A of the Wetland Conservation Ordinance. Specifically the proposed use is consistent with the protection of land areas which have been found to be subjected to standing water, flooding, high water tables for extended periods of time. Below is a summary of the proposed project's consistency with the purposes and intent of the Wetland Conservation Ordinance.

1. Prevent the development of structures and land uses on naturally occurring wetlands which will contribute to pollution of surface and groundwater by sewage, sediment or noxious substance. – *The proposed project avoids development of structures and conversion of land use with wetland areas.*
2. Prevent the destruction of, or significant changes to natural wetlands which provide flood protection. - *The project site does not contain any areas mapped within the 100-year floodplain.*
3. Protect rare, unique and unusual natural communities, both flora and fauna. - *Based on correspondence received from USFWS and NH Natural heritage inventory no known state- or federally-listed threatened or endangered species or critical habitats occur within the immediate vicinity of the project site..*
4. Protect wildlife habitats and maintain ecological balances. - *The proposed project affects on wetland and stream habitats is minor. The affect of the project on wildlife will be mitigated by maintaining a corridor through the site for migration of wildlife.*
5. Protect potential water supplies and existing aquifers (water-bearing stratum) and aquifer recharge areas. - *The hydrology and drainage patterns within wetlands will be maintained. The recharge/discharge of wetland areas will be maintained thus protecting surface and groundwater interactions and aquifer recharge.*
6. Prevent expenditure of municipal funds for the purposes of providing and/or maintaining essential services and utilities which might be required as a result of misuse or abuse of wetlands. – *Club Motorsports is not expecting the expenditure of municipal funds for the purposes of providing and/or maintaining essential services and utilities on the project site.*
7. Encourage those low-intensity uses that can be harmoniously, appropriately and safely located in wetlands. - *The proposed project includes low intensity uses in wetlands and included primarily access crossings and minimal grading.*